

CLAIMS:

5 1. An infrared absorption filter which has a transmittance of not higher than 30% in the near-infrared region in the wavelength range of 800 to 1100 nm; a difference of 10% or less between a maximum value and a minimum value of transmittance in the visible light region in the wavelength range of 450 to 650 nm; and a transmittance of not lower than 50% at a wavelength of 550 nm,

10 said filter, after being left to stand in the air atmosphere at a temperature of 60°C and a humidity of 95% for 1000 hours, having a transmittance of not higher than 30% in the near-infrared region in the wavelength range of 800 to 1100 nm, and a difference of 10% or less  
15 between a maximum value and a minimum value of transmittance in the visible light region in the wavelength range of 450 to 650 nm.

20 2. The infrared absorption filter according to claim 1, wherein after being left to stand in the air atmosphere at a temperature of 80°C for 1000 hours, the filter has a transmittance of not higher than 30% in the near-infrared region in the wavelength range of 800 to 1100 nm and has a difference of 10% or less between a maximum value and a minimum value of transmittance in the  
25 visible light region in the wavelength range of 450 to 650

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film.

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absorbing layer is a polyester resin.

9. The infrared absorption filter according to claim 3, wherein the filter has an electroconductive layer of metal mesh having an aperture ratio of not less than  
5 50% on the same side as the infrared-absorbing layer of the filter or on the opposed side thereof.

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10 10. The infrared absorption filter according to claim 3, wherein the filter has a transparent electroconductive layer on the same side as the infrared-absorbing layer of the filter or on the opposed side thereof.

11. The infrared absorption filter according to claim 10, wherein the transparent electroconductive layer is formed of a metal oxide.

15 12. The infrared absorption filter according to claim 10, wherein the transparent electroconductive layer has a repeatedly laminated structure in which at least three layers are laminated in the order of metal oxide/metal/metal oxide.

20 13. The infrared absorption filter according to claim 12, wherein the constituent metal layer of the transparent electroconductive layer is formed of silver, gold or a compound containing any of them.

25 14. The infrared absorption filter according to claim 1, wherein a hard coat-treated layer is formed as an

outermost layer of the filter.

15. The infrared absorption filter according to claim 1, wherein an antireflection layer is formed as an outermost layer of the filter.

5 16. The infrared absorption filter according to claim 1, wherein an antiglare-treated layer is formed as an outermost layer of the filter.

10 17. The infrared absorption filter according to claim 1, wherein the filter is disposed in front of a plasma display.